Probing the Deaths of Sea Turtles in the Gulf of Mexico

Dr. Stacy snips tissue samples from a Kemp's ridley sea turtle and gives them to Jennifer Muller, a biological scientist at the UF's College of Veterinary Science.

High resolution (Credit: NOAA)

On a recent afternoon in his University of Florida veterinary laboratory, NOAA's Dr. Brian Stacy cuts into the bottom shell of a dead **Kemp's ridley sea turtle** to examine the animal internally and to take tissue samples that could help answer a nagging question: Why did this turtle die?

Dr. Stacy, a NOAA veterinarian and an assistant professor at **UF's College of Veterinary Medicine**, will do two necropsies, or animal autopsies, today — this one, on a robust turtle that had no evidence of external oil when it was found dead in nearshore Gulf waters off Mississippi, and another on a turtle with an oiled body when it was found alive, but debilitated, in Louisiana. Both turtles were found by members of a network of federal, state and nonprofit partners working to help sea turtles since the Deepwater Horizon/BP oil spill began.

Dr. Stacy examines a dead sea turtle's internal organs.

High resolution (Credit:NOAA)

“I can already see something significant,” says Dr. Stacy as he cuts into the gastrointestinal tract of the dead, unoiled sea turtle and examined its contents.

He points to a piece of shrimp in its esophagus, and fish bones and pieces of crab in its stomach. Although crab is a primary part of the natural diet of Kemp’s ridley sea turtles, these air-breathing reptiles do not normally feed on shrimp and fish in the wild. Finding a sea turtle that has been feasting on shrimp and fish is evidence that the animal may have been caught in a fishing net where it was eating the catch or feeding on fish unintentionally caught (known as bycatch) and later discarded.

Oil Is But One Suspect

A number of the necropsies conducted on sea turtles with no visible evidence of oil have suggested that they may have drowned by being caught in fishing nets, unable to ascend to the surface to breath. Necropsy results have been shared with state and federal enforcement officials who have stepped up efforts to prevent turtles from being incidentally captured and killed in fishing operations.

Dr. Stacy examines a dead Kemp's ridley sea turtle that had been found covered in oil.

High resolution (Credit:NOAA)

The autopsy of the turtle with visible evidence of oil revealed a very sick animal with inflamed lungs and trachea — signs of pneumonia. The animal had been found alive when it was taken to the **Audubon Nature Institute** near New Orleans for rehabilitation, but subsequently died.

Saving the Gulf’s Sea Turtles: A Plan, and the People, In Place

NOAA is part of a team of federal, state and private sector partners **working to assist sea turtles** in the Gulf of Mexico as they face the effects of oiled waters and nesting habitats. Teams go out on the water to rescue turtles from oiled areas and efforts are underway to move turtle nests from oiled areas so that hatchlings can be released away from oiled waters.

Dr. Stacy carries a dead sea turtle to the examining table.

High resolution (Credit:NOAA)

Dr. Stacy's forensic work in the UF laboratory addressing the high numbers of turtles found dead on the shoreline and in the northern Gulf waters aims to shine a light on the causes of these **strandings** and will hopefully lead to more effective conservation measures to save these threatened and endangered animals.

Additional Resources

You can read about the Unified Command's plan to protect sea turtles and their hatchlings **here**.

To learn more about how NOAA is working to save sea turtles in the Gulf of Mexico, download this **helpful fact sheet**, *Sea Turtle Strandings and the Deepwater Oil Spill*.

To access documented marine wildlife data pertaining to Deepwater Horizon/ BP oil spill, please visit **www.nmfs.noaa.gov/pr/health/oilspill.htm**.